UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/520,975 | 01/11/2005 | Kazuhiko Takabayashi | 09812.0203 | 6457 |

22852 7590 03/26/2008

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

| EXAMINER | |
|---|---|
| PATEL, ASHOKKUMAR B | |
| ART UNIT | PAPER NUMBER |
| 2154 | |
| MAIL DATE | DELIVERY MODE |
| 03/26/2008 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/520,975 | TAKABAYASHI ET AL. | |
| | Examiner | Art Unit | |
| | ASHOK B. PATEL | 2154 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *11 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) *6,15 and 24* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-14, 16-23 and 25-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *01/11/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

**1.** Claims 1-28 are subject to examination. Claims 6, 15 and 24 are cancelled.

### *Claim Rejections - 35 USC § 112*

**2.** The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**3.** Claims 2, 3, 4, 7, 11, 12, 13, 16, 20, 21, 22, , 25 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Referring to claims 2, 3, 4, 11, 12, 13, 20, 21, 22 and 28,**

These claims recite "and/or". The use of slashes symbol between descriptive elements in the claims renders the scope and meaning of the claims unclear, as slashes could be construed to mean "and", "or" or both "and" and "or".

For the purpose of this Office Action, "or" is being used.

**Referring to claim 7, 16 and 25,**

These claims recite "the same identification information". There is insufficient antecedent basis for this limitation in the claim.

### *Claim Rejections - 35 USC § 101*

**4.** 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**5.** Claim 28 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 28 recites "a computer program which can be reasonably interpreted by one of ordinary skill in the art as software, per se, and therefore not tangibly embodied in a manner so as to be executable.

***Claim Rejections - 35 USC § 102***

**6.** The following is a quotation of the appropriate paragraphs of 35U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**7.** Claims 1, 7-10, 16-19 and 25-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Fisher (US 6, 931, 018 B1).

**Referring to claim 1,**

Fisher teaches a device-to-device authentication system for authenticating a device on a home network (Fig. 1a, element 102, CPE) connectable to an external network Fig. 1a, elements 120) via a router (element 110 of Fig. 1a), characterized by comprising:

means for holding a MAC address of said router (col. 5, line 15-20, "FIG. 1a is a simplified block diagram of a communication network in accordance with a preferred embodiment of the present invention. Network 100 may be an in-home network or a local area network (LAN) and comprises a plurality of customer premises equipment (CPE) 102, 104, 106 coupled to home router 110.", **Please note "LAN" providing**

**communication between CPEs and router.)** set as a default gateway (element 110 of Fig. 1a); and

local environment management means for confirming whether or not another device requesting for accessing to said device on said home network is present on said home network based on whether or not a MAC address of said request-source device of accessing is identified or non-identified with a MAC address of said router set as a default gateway (Fig. 5, col. 7, line 8-47, "FIG. 6 is a simplified flow chart of a procedure for routing IP data packets in accordance with a preferred embodiment of the present invention. Packet routing process 600 is performed for all traffic that is received by the router. In step 602, IP data packets that are received from CPE on the in-home network are evaluated. The destination IP address in the IP data packet is compared with the IP addresses of the routing table. In step 604, when the destination IP address in the IP data packet does not match an IP addresses stored in the routing table, step 606 is performed. In step 606, the IP data packet is routed to the external network. This situation applies to traffic from the CPE that is not destined for another CPE located in the home or on the local network. In reference to FIG. 1, in step 606, IP data packets received from CPE at router interface 140 (FIG. 2) are transferred directly to router interface 144 (FIG. 2) for receipt by modem 114 (FIG. 1).

In step 604, when the destination IP address in the IP data packet matches an IP addresses stored in the routing table, step 608 is performed. In step 608, the router replaces the default gateway MAC address (filed 304 FIG. 3) in the IP data packet with the Ethernet address from the table that corresponds to the destination IP address in

the IP data packet evaluated in step 602. As a result of step 608, a revised data packet is created. In step 610, the revised data packet is placed back on the in-home network or local network for receipt by the appropriate CPE.

In task 612, IP data packets received from an external network are directly transferred to the internal network. In reference to FIG. 1, IP data packets received from modem 114 at router interface 144 (FIG. 2) are transferred directly to router interface 140 (FIG. 2).

Thus, a router and method of routing suitable for use in local networks and in-home use has been described. The method and router of the present invention permit a plurality of customer premises equipment (CPE) to communicate through a two-way broadband communication network to an internet service provider (ISP) to access the internet, while traffic destined for local CPE is contained within the local network of CPEs.").

**Referring to claim 7,**

Fisher teaches a device-to-device authentication system for authenticating a device on a home network (Fig. 1a, element 102) connectable to an external network (Fig. 1a, element 120) via a router (Fig. 1a, element 110), characterized by comprising:

means for sharing the same identification information regarding said home network between said devices on said same home network(col. 5, line 15-20, "FIG. 1a is a simplified block diagram of a communication network in accordance with a preferred embodiment of the present invention. Network 100 may be an in-home network or a local area network (LAN) and comprises a plurality of customer premises equipment

(CPE) 102, 104, 106 coupled to home router 110.", **Please note "LAN" providing communication between CPEs and router.)**; and

said local environment management means confirms whether or not each of said devices is present on said same home network based on whether or not each of said devices shares the same identification information regarding said home network. (Fig. 5, col. 7, line 8-47, "FIG. 6 is a simplified flow chart of a procedure for routing IP data packets in accordance with a preferred embodiment of the present invention. Packet routing process 600 is performed for all traffic that is received by the router. In step 602, IP data packets that are received from CPE on the in-home network are evaluated. The destination IP address in the IP data packet is compared with the IP addresses of the routing table. In step 604, when the destination IP address in the IP data packet does not match an IP addresses stored in the routing table, step 606 is performed. In step 606, the IP data packet is routed to the external network. This situation applies to traffic from the CPE that is not destined for another CPE located in the home or on the local network. In reference to FIG. 1, in step 606, IP data packets received from CPE at router interface 140 (FIG. 2) are transferred directly to router interface 144 (FIG. 2) for receipt by modem 114 (FIG. 1).

In step 604, when the destination IP address in the IP data packet matches an IP addresses stored in the routing table, step 608 is performed. In step 608, the router replaces the default gateway MAC address (filed 304 FIG. 3) in the IP data packet with the Ethernet address from the table that corresponds to the destination IP address in the IP data packet evaluated in step 602. As a result of step 608, a revised data packet

is created. In step 610, the revised data packet is placed back on the in-home network or local network for receipt by the appropriate CPE.

In task 612, IP data packets received from an external network are directly transferred to the internal network. In reference to FIG. 1, IP data packets received from modem 114 at router interface 144 (FIG. 2) are transferred directly to router interface 140 (FIG. 2).

Thus, a router and method of routing suitable for use in local networks and in-home use has been described. The method and router of the present invention permit a plurality of customer premises equipment (CPE) to communicate through a two-way broadband communication network to an internet service provider (ISP) to access the internet, while traffic destined for local CPE is contained within the local network of CPEs.").

**Referring to claim 8,**

Fisher teaches the device-to-device authentication system according to claim 7, characterized

in that:

each of said devices acquires a MAC address of said router set as a default gateway as identification information regarding said home network (col. 5, line 15-20, "FIG. 1a is a simplified block diagram of a communication network in accordance with a preferred embodiment of the present invention. Network 100 may be an in-home network or a local area network (LAN) and comprises a plurality of customer premises equipment (CPE) 102, 104, 106 coupled to home router 110.", **Please note "LAN"**

**providing communication between CPEs and router which is** set as a default gateway (element 110 of Fig. 1a)); and

whether or not each of said devices is present on said same home network is confirmed based on whether or not each of said devices has a MAC address of said same default gateway (Fig. 5, col. 7, line 8-47, "FIG. 6 is a simplified flow chart of a procedure for routing IP data packets in accordance with a preferred embodiment of the present invention. Packet routing process 600 is performed for all traffic that is received by the router. In step 602, IP data packets that are received from CPE on the in-home network are evaluated. The destination IP address in the IP data packet is compared with the IP addresses of the routing table. In step 604, when the destination IP address in the IP data packet does not match an IP addresses stored in the routing table, step 606 is performed. In step 606, the IP data packet is routed to the external network. This situation applies to traffic from the CPE that is not destined for another CPE located in the home or on the local network. In reference to FIG. 1, in step 606, IP data packets received from CPE at router interface 140 (FIG. 2) are transferred directly to router interface 144 (FIG. 2) for receipt by modem 114 (FIG. 1).

In step 604, when the destination IP address in the IP data packet matches an IP addresses stored in the routing table, step 608 is performed. In step 608, the router replaces the default gateway MAC address (filed 304 FIG. 3) in the IP data packet with the Ethernet address from the table that corresponds to the destination IP address in the IP data packet evaluated in step 602. As a result of step 608, a revised data packet

is created. In step 610, the revised data packet is placed back on the in-home network or local network for receipt by the appropriate CPE.

In task 612, IP data packets received from an external network are directly transferred to the internal network. In reference to FIG. 1, IP data packets received from modem 114 at router interface 144 (FIG. 2) are transferred directly to router interface 140 (FIG. 2).

Thus, a router and method of routing suitable for use in local networks and in-home use has been described. The method and router of the present invention permit a plurality of customer premises equipment (CPE) to communicate through a two-way broadband communication network to an internet service provider (ISP) to access the internet, while traffic destined for local CPE is contained within the local network of CPEs.").

**Referring to claim 9,**

Fisher teaches the device-to-device authentication system according to claim 7, characterized in that:

a local environment management apparatus for supplying network identification information is installed on said home network (col. 5, line 15-20, "FIG. 1a is a simplified block diagram of a communication network in accordance with a preferred embodiment of the present invention. Network 100 may be an in-home network or a local area network (LAN) and comprises a plurality of customer premises equipment (CPE) 102, 104, 106 coupled to home router 110.", **Please note "LAN" providing communication**

**between CPEs and router which is** set as a default gateway (element 110 of Fig. 1a)); and

each of said devices acquires a MAC address of said local environment management apparatus as identification information regarding said home network; and whether or not each of said device is present on said same home network is confirmed based on whether or not each of said devices has a MAC address of said same local environment management apparatus(Fig. 5, col. 7, line 8-47, "FIG. 6 is a simplified flow chart of a procedure for routing IP data packets in accordance with a preferred embodiment of the present invention. Packet routing process 600 is performed for all traffic that is received by the router. In step 602, IP data packets that are received from CPE on the in-home network are evaluated. The destination IP address in the IP data packet is compared with the IP addresses of the routing table. In step 604, when the destination IP address in the IP data packet does not match an IP addresses stored in the routing table, step 606 is performed. In step 606, the IP data packet is routed to the external network. This situation applies to traffic from the CPE that is not destined for another CPE located in the home or on the local network. In reference to FIG. 1, in step 606, IP data packets received from CPE at router interface 140 (FIG. 2) are transferred directly to router interface 144 (FIG. 2) for receipt by modem 114 (FIG. 1).

In step 604, when the destination IP address in the IP data packet matches an IP addresses stored in the routing table, step 608 is performed. In step 608, the router replaces the default gateway MAC address (filed 304 FIG. 3) in the IP data packet with the Ethernet address from the table that corresponds to the destination IP address in

the IP data packet evaluated in step 602. As a result of step 608, a revised data packet is created. In step 610, the revised data packet is placed back on the in-home network or local network for receipt by the appropriate CPE.

In task 612, IP data packets received from an external network are directly transferred to the internal network. In reference to FIG. 1, IP data packets received from modem 114 at router interface 144 (FIG. 2) are transferred directly to router interface 140 (FIG. 2).

Thus, a router and method of routing suitable for use in local networks and in-home use has been described. The method and router of the present invention permit a plurality of customer premises equipment (CPE) to communicate through a two-way broadband communication network to an internet service provider (ISP) to access the internet, while traffic destined for local CPE is contained within the local network of CPEs.").

**Referring to claim 10,**

Claim 10 is a claim to a method carried out by the system of claim 1. Therefore, claim 10 is rejected for the reasons set forth for claim 1.

**Referring to claim 16,**

Claim 16 is a claim to a method carried out by the system of claim 7. Therefore, claim 16 is rejected for the reasons set forth for claim 7.

**Referring to claim 17,**

Claim 17 is a claim to a method carried out by the system of claim 8. Therefore, claim 17 is rejected for the reasons set forth for claim 8.

**Referring to claim 18,**

Claim 18 is a claim to a method carried out by the system of claim 9. Therefore, claim 18 is rejected for the reasons set forth for claim 9.

**Referring to claim 19,**

Claim 19 is a claim to a communication apparatus of the system of claim 1. Therefore, claim 19 is rejected for the reasons set forth for claim 1.

**Referring to claim 25,**

Claim 25 is a claim to a communication apparatus of the system of claim 7. Therefore, claim 25 is rejected for the reasons set forth for claim 7.

**Referring to claim 26,**

Claim 26 is a claim to a communication apparatus of the system of claim 8. Therefore, claim 26 is rejected for the reasons set forth for claim 8.

**Referring to claim 27,**

Claim 27 is a claim to a communication apparatus of the system of claim 9. Therefore, claim 27 is rejected for the reasons set forth for claim 9.

***Claim Rejections - 35 USC § 103***

**7.** The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**8.** Claim 2-5, 11-14 and 20-23 are rejected under 35 U.S.C. 103(a) as being Unpatentable over Fisher (US 6, 931, 018 B1) in view of Applicant Admitted Prior Art (hereinafter AAPA)

**Referring to claim 2,**

Keeping in mind the teachings of Fisher as stated above for claim 1, Fisher teaches "wherein, in response to confirmation of presence of both devices on said same home network" (Fig. 5, col. 7, line 8-47, "FIG. 6 is a simplified flow chart of a procedure for routing IP data packets in accordance with a preferred embodiment of the present invention. Packet routing process 600 is performed for all traffic that is received by the router. In step 602, IP data packets that are received from CPE on the in-home network are evaluated. The destination IP address in the IP data packet is compared with the IP addresses of the routing table. In step 604, when the destination IP address in the IP data packet does not match an IP addresses stored in the routing table, step 606 is performed. In step 606, the IP data packet is routed to the external network. This situation applies to traffic from the CPE that is not destined for another CPE located in the home or on the local network. In reference to FIG. 1, in step 606, IP data packets received from CPE at router interface 140 (FIG. 2) are transferred directly to router interface 144 (FIG. 2) for receipt by modem 114 (FIG. 1).

In step 604, when the destination IP address in the IP data packet matches an IP addresses stored in the routing table, step 608 is performed. In step 608, the router replaces the default gateway MAC address (filed 304 FIG. 3) in the IP data packet with the Ethernet address from the table that corresponds to the destination IP address in

the IP data packet evaluated in step 602. As a result of step 608, a revised data packet is created. In step 610, the revised data packet is placed back on the in-home network or local network for receipt by the appropriate CPE.

In task 612, IP data packets received from an external network are directly transferred to the internal network. In reference to FIG. 1, IP data packets received from modem 114 at router interface 144 (FIG. 2) are transferred directly to router interface 140 (FIG. 2).

Thus, a router and method of routing suitable for use in local networks and in-home use has been described. The method and router of the present invention permit a plurality of customer premises equipment (CPE) to communicate through a two-way broadband communication network to an internet service provider (ISP) to access the internet, while traffic destined for local CPE is contained within the local network of CPEs.").

Fisher fails to teach one of said devices is a home server for legitimately acquiring contents, whereas the other of said devices is a client for making a request for said contents to said home server for use; and said home server provides said contents and/or issues a license for said contents to said client.

AAPA teaches one of said devices is a home server for legitimately acquiring contents, whereas the other of said devices is a client for making a request for said contents to said home server for use; and said home server provides said contents and/or issues a license for said contents to said client (Applicant's Specification page 2).

Thus, it would have been recognized by one of ordinary skill in the art that applying the known technique taught by Fisher to the AAPA would have yielded predicable results and resulted in an improved system, namely, a system that would provide for having one of the CPE's being the home server legitimately pulling the content from the Internet and serving it to the other home network client CPE's under the strict control being provided by the router 100 such as identifying the home network CPE's from their MAC address.

**Referring to claim 3,**

Keeping in mind the teachings of Fisher as stated above for claim 1, Fisher teaches "to said clients that is confirmed to be present on said same home network." (Fig. 5, col. 7, line 8-47, "FIG. 6 is a simplified flow chart of a procedure for routing IP data packets in accordance with a preferred embodiment of the present invention. Packet routing process 600 is performed for all traffic that is received by the router. In step 602, IP data packets that are received from CPE on the in-home network are evaluated. The destination IP address in the IP data packet is compared with the IP addresses of the routing table. In step 604, when the destination IP address in the IP data packet does not match an IP addresses stored in the routing table, step 606 is performed. In step 606, the IP data packet is routed to the external network. This situation applies to traffic from the CPE that is not destined for another CPE located in the home or on the local network. In reference to FIG. 1, in step 606, IP data packets received from CPE at router interface 140 (FIG. 2) are transferred directly to router interface 144 (FIG. 2) for receipt by modem 114 (FIG. 1).

In step 604, when the destination IP address in the IP data packet matches an IP addresses stored in the routing table, step 608 is performed. In step 608, the router replaces the default gateway MAC address (filed 304 FIG. 3) in the IP data packet with the Ethernet address from the table that corresponds to the destination IP address in the IP data packet evaluated in step 602. As a result of step 608, a revised data packet is created. In step 610, the revised data packet is placed back on the in-home network or local network for receipt by the appropriate CPE.

In task 612, IP data packets received from an external network are directly transferred to the internal network. In reference to FIG. 1, IP data packets received from modem 114 at router interface 144 (FIG. 2) are transferred directly to router interface 140 (FIG. 2).

Thus, a router and method of routing suitable for use in local networks and in-home use has been described. The method and router of the present invention permit a plurality of customer premises equipment (CPE) to communicate through a two-way broadband communication network to an internet service provider (ISP) to access the internet, while traffic destined for local CPE is contained within the local network of CPEs.").

Fisher fails to teach device-to-device authentication system according to claim 1, characterized in that: two or more home servers are able to be installed on said home network; wherein each of said home servers provides said contents and/or issues a license for said contents.

AAPA teaches device-to-device authentication system according to claim 1, characterized in that: two or more home servers are able to be installed on said home network; wherein each of said home servers provides said contents and/or issues a license for said contents.(Applicant's Specification page 2).

Thus, it would have been recognized by one of ordinary skill in the art that applying the known technique taught by Fisher to the AAPA would have yielded predicable results and resulted in an improved system, namely, a system that would provide for having one or more of the CPE's being the home servers legitimately pulling the content from the Internet and serving it to the other home network client CPE's under the strict control being provided by the router 100 such as identifying the home network CPE's from their MAC address.

**Referring to claim 4,**

Keeping in mind the teachings of Fisher as stated above for claim 3, Fisher teaches device-to-device authentication system according to claim 3, characterized in that: said client is able to receive provision of said contents from CPE's on said same home network ((Fig. 5, col. 7, line 8-47, "FIG. 6 is a simplified flow chart of a procedure for routing IP data packets in accordance with a preferred embodiment of the present invention. Packet routing process 600 is performed for all traffic that is received by the router. In step 602, IP data packets that are received from CPE on the in-home network are evaluated. The destination IP address in the IP data packet is compared with the IP addresses of the routing table. In step 604, when the destination IP address in the IP data packet does not match an IP addresses stored in the routing table, step 606 is

performed. In step 606, the IP data packet is routed to the external network. This situation applies to traffic from the CPE that is not destined for another CPE located in the home or on the local network. In reference to FIG. 1, in step 606, IP data packets received from CPE at router interface 140 (FIG. 2) are transferred directly to router interface 144 (FIG. 2) for receipt by modem 114 (FIG. 1).

In step 604, when the destination IP address in the IP data packet matches an IP addresses stored in the routing table, step 608 is performed. In step 608, the router replaces the default gateway MAC address (filed 304 FIG. 3) in the IP data packet with the Ethernet address from the table that corresponds to the destination IP address in the IP data packet evaluated in step 602. As a result of step 608, a revised data packet is created. In step 610, the revised data packet is placed back on the in-home network or local network for receipt by the appropriate CPE.

In task 612, IP data packets received from an external network are directly transferred to the internal network. In reference to FIG. 1, IP data packets received from modem 114 at router interface 144 (FIG. 2) are transferred directly to router interface 140 (FIG. 2).

Thus, a router and method of routing suitable for use in local networks and in-home use has been described. The method and router of the present invention permit a plurality of customer premises equipment (CPE) to communicate through a two-way broadband communication network to an internet service provider (ISP) to access the internet, while traffic destined for local CPE is contained within the local network of CPEs.").

Fisher fails to teach device-to-device authentication system according to claim 3, characterized in that: said client is able to receive provision of said contents and/or issuance of said license for said contents from said two or more home servers on said same home network.

AAPA teaches device-to-device authentication system according to claim 3, characterized in that: said client is able to receive provision of said contents and/or issuance of said license for said contents from said two or more home servers on said same home network. (Applicant's Specification page 2).

Thus, it would have been recognized by one of ordinary skill in the art that applying the known technique taught by Fisher to the AAPA would have yielded predicable results and resulted in an improved system, namely, a system that would provide for having one or more of the CPE's being the home servers legitimately pulling the content from the Internet and serving it to the other home network client CPE's under the strict control being provided by the router 100 such as identifying the home network CPE's from their MAC address.

**Referring to claim 5,**

Keeping in mind the teachings of Fisher as stated above for claim 3, Fisher teaches device-to-device authentication system according to claim 3, characterized in that: said client is able to use said contents acquired from a plurality of home CPEs on said same home network and upon connection to a home CPEs on an other home network, said client is not able to use said contents acquired from said home CPEs on said home networks other than said other home network. (Fig. 5, col. 7, line 8-47, "FIG.

6 is a simplified flow chart of a procedure for routing IP data packets in accordance with a preferred embodiment of the present invention. Packet routing process 600 is performed for all traffic that is received by the router. In step 602, IP data packets that are received from CPE on the in-home network are evaluated. The destination IP address in the IP data packet is compared with the IP addresses of the routing table. In step 604, when the destination IP address in the IP data packet does not match an IP addresses stored in the routing table, step 606 is performed. In step 606, the IP data packet is routed to the external network. This situation applies to traffic from the CPE that is not destined for another CPE located in the home or on the local network. In reference to FIG. 1, in step 606, IP data packets received from CPE at router interface 140 (FIG. 2) are transferred directly to router interface 144 (FIG. 2) for receipt by modem 114 (FIG. 1).

In step 604, when the destination IP address in the IP data packet matches an IP addresses stored in the routing table, step 608 is performed. In step 608, the router replaces the default gateway MAC address (filed 304 FIG. 3) in the IP data packet with the Ethernet address from the table that corresponds to the destination IP address in the IP data packet evaluated in step 602. As a result of step 608, a revised data packet is created. In step 610, the revised data packet is placed back on the in-home network or local network for receipt by the appropriate CPE.

In task 612, IP data packets received from an external network are directly transferred to the internal network. In reference to FIG. 1, IP data packets received

from modem 114 at router interface 144 (FIG. 2) are transferred directly to router interface 140 (FIG. 2).

Thus, a router and method of routing suitable for use in local networks and in-home use has been described. The method and router of the present invention permit a plurality of customer premises equipment (CPE) to communicate through a two-way broadband communication network to an internet service provider (ISP) to access the internet, while traffic destined for local CPE is contained within the local network of CPEs.").

Fisher fails to teach home servers on said same home network.

AAPA teaches home servers on said same home network. (Applicant's Specification page 2).

Thus, it would have been recognized by one of ordinary skill in the art that applying the known technique taught by Fisher to the AAPA would have yielded predicable results and resulted in an improved system, namely, a system that would provide for having one or more of the CPE's being the home servers legitimately pulling the content from the Internet and serving it to the other home network client CPE's under the strict control being provided by the router 100 such as identifying the home network CPE's from their MAC address.

**Referring to claim 11,**

Claim 11 is a claim to a method carried out by the system of claim 2. Therefore, claim 11 is rejected for the reasons set forth for claim 2.

**Referring to claim 12,**

Claim 12 is a claim to a method carried out by the system of claim 3. Therefore, claim 12 is rejected for the reasons set forth for claim 3.

**Referring to claim 13,**

Claim 13 is a claim to a method carried out by the system of claim 4. Therefore, claim 13 is rejected for the reasons set forth for claim 4.

**Referring to claim 14,**

Claim 14 is a claim to a method carried out by the system of claim 5. Therefore, claim 14 is rejected for the reasons set forth for claim 5.

**Referring to claims 20 and 21,**

Claims 20 and 21 are claims to an apparatus carried out by the method of claim 11. Therefore, claims 20 and 21 are rejected for the reasons set forth for claim 11.

**Referring to claim 22,**

Claims 22 is a claim to an apparatus carried out by the method of claim 3. Therefore, claim 22 is rejected for the reasons set forth for claim 3.

**Referring to claim 23,**

Claims 23 is a claim to an apparatus carried out by the method of claim 5. Therefore, claim 23 is rejected for the reasons set forth for claim 5.

**Referring to claim 28,**

Fisher teaches a computer program described in a computer-readable format so as to execute a process for authenticating a device, on a home network connectable to an external network via a router, and a client for making a request for said contents for use are present, said computer program characterized by comprising: a local

environment management step of confirming whether or not said home CPEs and said client are present on said home network based on whether or not a MAC address of said request-source client of accessing is identified or non-identified with a MAC address of said router set as a default gateway; and confirmation of presence of both said devices on said same home network in said local environment management step. ((Fig. 5, col. 7, line 8-47, "FIG. 6 is a simplified flow chart of a procedure for routing IP data packets in accordance with a preferred embodiment of the present invention. Packet routing process 600 is performed for all traffic that is received by the router. In step 602, IP data packets that are received from CPE on the in-home network are evaluated. The destination IP address in the IP data packet is compared with the IP addresses of the routing table. In step 604, when the destination IP address in the IP data packet does not match an IP addresses stored in the routing table, step 606 is performed. In step 606, the IP data packet is routed to the external network. This situation applies to traffic from the CPE that is not destined for another CPE located in the home or on the local network. In reference to FIG. 1, in step 606, IP data packets received from CPE at router interface 140 (FIG. 2) are transferred directly to router interface 144 (FIG. 2) for receipt by modem 114 (FIG. 1).

In step 604, when the destination IP address in the IP data packet matches an IP addresses stored in the routing table, step 608 is performed. In step 608, the router replaces the default gateway MAC address (filed 304 FIG. 3) in the IP data packet with the Ethernet address from the table that corresponds to the destination IP address in the IP data packet evaluated in step 602. As a result of step 608, a revised data packet

is created. In step 610, the revised data packet is placed back on the in-home network or local network for receipt by the appropriate CPE.

In task 612, IP data packets received from an external network are directly transferred to the internal network. In reference to FIG. 1, IP data packets received from modem 114 at router interface 144 (FIG. 2) are transferred directly to router interface 140 (FIG. 2).

Thus, a router and method of routing suitable for use in local networks and in-home use has been described. The method and router of the present invention permit a plurality of customer premises equipment (CPE) to communicate through a two-way broadband communication network to an internet service provider (ISP) to access the internet, while traffic destined for local CPE is contained within the local network of CPEs.").

Fisher fails to teach "network on which a home server for legitimately acquiring contents from said external network, a content-provision step of providing said contents and/or issuing a license for said contents to said client by said home server."

AAPA teaches "network on which a home server for legitimately acquiring contents from said external network, a content-provision step of providing said contents and/or issuing a license for said contents to said client by said home server." (Applicant's Specification page 2).

Thus, it would have been recognized by one of ordinary skill in the art that applying the known technique taught by Fisher to the AAPA would have yielded predicable results and resulted in an improved system, namely, a system that would

provide for having one or more of the CPE's being the home servers legitimately pulling the content from the Internet and serving it to the other home network client CPE's under the strict control being provided by the router 100 such as identifying the home network CPE's from their MAC address.

***Conclusion***

**Examiner's note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 6:30 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan A. Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ashok B. Patel/

Ashok B. Patel
Examiner,
Art Unit 2154